



L4 ANSWER 6 OF 6 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1980:55172 CAPLUS

DOCUMENT NUMBER: 92:55172

TITLE: A particulate glucosyltransferase catalyzing the formation of 5'-O-( $\beta$ -D-glucopyranosyl)pyridoxine from pyridoxine: the occurrence in the seedlings of *Pisum sativum* L

AUTHOR(S): Tadera, Kenjiro; Nakamura, Mahomi; Yagi, Fumio; Kobayashi, Akira

CORPORATE SOURCE: Fac. Agric., Kagoshima Univ., Kagoshima, 890, Japan

SOURCE: Journal of Nutritional Science and Vitaminology (1979), 25(4), 347-50

CODEN: JNSVA5; ISSN: 0301-4800

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The 20,000-50,000 g particulate fraction obtained from pea seedlings with a protein concentration of 20 mg/mL catalyzed the glucosylation of pyridoxine. The rate of glucosylation was linear with time for  $\geq 40$  min and proportional to the protein concentration at  $\leq 20$  mg/mL. The pH optimum, determined, in several different buffer systems, was between 7.8 and 8.8. Apparent  $K_m$  values were 0.4 and 0.7 mM for pyridoxine and UDP-glucose resp. The 5'-O-( $\beta$ -D-glucopyranosyl)pyridoxine reaction product, purified by Sephadex G-10 gel filtration and by paper chromatog., was confirmed by chemical tests and  $R_f$  value detns.

IT 72551-78-1

RL: FORM (Formation, nonpreparative)

(formation. of, from pyridoxine, pea particulate glucosyltransferase catalysis of)

RN 72551-78-1 CAPLUS

CN  $\beta$ -D-Glucopyranoside, 4,5-bis(hydroxymethyl)-2-methyl-3-pyridinyl (9CI) (CA INDEX NAME)

Absolute stereochemistry.

